## IN THE CLAIMS

Please enter the following amendments:

- 1. (Original) A memory system for converting virtual addresses into physical addresses at the user code level and conveying the physical addresses to a peripheral device, the system comprising:
  - a virtual memory having memory pages, each memory page having a virtual memory address and a corresponding physical memory address in a main memory;
  - a microprocessor having a translation look-aside buffer which holds
    a subset of the virtual addresses for all the pages and their
    corresponding physical memory addresses in the main
    memory; and
  - a set of user-code level software instructions stored in said main memory and executable by said microprocessor for converting a virtual memory address into the corresponding physical memory address, pinning the page, and conveying the physical memory address to the peripheral device at a user code level without requiring a system call.

Please cancel Claims 2 through 31.